APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,919	06/29/2001	Robert Bruce Hirsh	06975-200001/ Security 13	4606

26171 7590 12/09/2004	EXAMINER
FISH & RICHARDSON P.C. 1425 K STREET, N.W. 11TH FLOOR WASHINGTON, DC 20005-3500	CERVETTI, DAVID GARCIA

ART UNIT	PAPER NUMBER
2136	

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/894,919	HIRSH, ROBERT BRUCE
	Examiner	Art Unit	
	David G. Cervetti	2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>29 June 2001</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-54</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>29 June 2001</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: figure 4, reference character 450, and figure 8, reference character 450. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: reference character 470 (page 9, line 12). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled

"Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct

any portion of the drawing figures. If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office

action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: the term

"IMAP" (page 4, line 30), while well known in the art, this term has not been defined.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine,
> manufacture, or composition of matter, or any new and useful improvement
> thereof, may obtain a patent therefor, subject to the conditions and requirements
> of this title.

Claims 1-19 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter. Claim 1 states "a propagated signal for

leveraging a persistent connection", a propagated signal is considered non-statutory

subject matter. Dependent claims 2-19 are rejected based on their dependency from

claim 1.

Claims 40-54 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter. Claim 40 states "persistent connection means

for establishing a persistent connection", and "broker means for brokering". These

limitations are considered non-statutory subject matter because they consist on

software code for establishing the persistent connection (page 1, lines 18-25) and

brokering a connection (page 2, lines 20-30). Dependent claims 41-54 are rejected

based on their dependency from claim 40.

To expedite a complete examination of the application, the claims rejected under

35 U.S.C. 101 (non-statutory) above are further rejected as set forth below in

anticipation of applicant amending these claims to place them within the four statutory

categories of invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under
section 122(b), by another filed in the United States before the invention by the
applicant for patent or (2) a patent granted on an application for patent by
another filed in the United States before the invention by the applicant for patent,
except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application
filed in the United States only if the international application designated the
United States and was published under Article 21(2) of such treaty in the English
language.

Claims 1, 6-9, 20, 25-28, 40, 45-48 are rejected under 35 U.S.C. 102(e) as being

anticipated by French et al.

Regarding claim 1, French et al. teach a computer program stored on a computer

readable medium or a propagated signal for leveraging a persistent connection to

provide a client access to a secured service, the computer program comprising: an input

code segment that causes a computer to receive input from a client (column 3, lines 15-

20); a persistent connection code segment that causes the computer to establish a

persistent connection with the client in response to a first request received through the

input code segment from the client (column 3, lines 65-67, column 4, lines 1-14); and a

broker code segment that causes the computer to broker a connection between the

client and a secured service based on a second request received through the input

code segment from the client by leveraging the persistent connection with the client

(column 5, lines 10-42).

Regarding claim 6, French et al. teach the computer program of claim 1 wherein

the persistent connection code segment comprises: a receiving code segment that

causes the computer to receive keystone authentication information from the client; a

keystone authentication code segment that causes the computer to authenticate the

client based on the keystone authentication information and to provide a keystone

authentication associated with the persistent connection; and a connection code

segment that causes the computer to establish the persistent connection with the client

based on the keystone authentication (column 5, lines 25-53).

Regarding claim 7, French et al. teach the computer program of claim 6 wherein

the broker code segment includes a leveraging code segment that causes the computer

to receive the second request from the client for connection to the secured service after

the persistent connection to the client is established (column 6, lines 16-27).

Regarding claim 8, French et al. teach the computer program of claim 7 wherein

the leveraging code segment further comprises: a leveraged authentication code

segment that causes the computer to provide a leveraged authentication based on the

keystone authentication associated with the persistent connection; and a leveraged

connection code segment that causes the computer to use the leveraged authentication to establish the connection with the secured service (column 5, lines 43-53, column 6, lines 1-27).

Regarding claim 9, French et al. teach the computer program of claim 8 wherein the leveraged authentication code segment comprises a transparent authentication code segment that causes the computer to provide the leveraged authentication based on the keystone authentication without provision by the client of authentication information duplicative or additional to the keystone authentication information used to establish the persistent connection (column 6, lines 23-25).

Regarding claim 20, French et al. teach a method of leveraging a persistent connection to provide a client access to a secured service (column 3, lines 5-25), the method comprising: receiving a first request from a client (column 3, lines 25-48); establishing a persistent connection with the client in response to the first request from the client (column 3, lines 65-67, column 4, lines 1-14); receiving a second request from the client (column 5, lines 1-25); and brokering a connection between the client and a secured service based on the second request from the client by leveraging the persistent connection with the client (column 5, lines 1-25).

Regarding claim 25, French et al. teach the method of claim 20 wherein establishing the persistent connection comprises: receiving keystone authentication information from the client; authenticating the client based on the keystone authentication information to provide a keystone authentication associated with the

persistent connection; and establishing the persistent connection with the client based

on the keystone authentication (column 5, lines 25-53).

Regarding claim 26, French et al. teach the method of claim 25 wherein

leveraging the persistent connection includes receiving the second request from the

client for connection to the secured service after the persistent connection to the client

is established (column 6, lines 16-27).

Regarding claim 27, French et al. teach the method of claim 26 wherein

leveraging the persistent connection with the client includes: providing a leveraged

authentication based on the keystone authentication associated with the persistent

connection; and using the leveraged authentication to establish the connection with the

secured service (column 5, lines 43-53, column 6, lines 1-27).

Regarding claim 28, French et al. teach the method of claim 27 wherein the

keystone authentication is used to provide the leveraged authentication without

provision by the client of authentication information duplicative or additional to the

keystone authentication information used to establish the persistent connection (column

6, lines 23-25).

Regarding claim 40, French et al. teach a system for leveraging a persistent

connection to provide a client access to a secured service (column 3, lines 5-25), the

system comprising: input means for receiving input from a client (column 3, lines 25-48);

persistent connection means for establishing a persistent connection with a client in

response to a first request received through the input means from the client (column 3,

lines 65-67, column 4, lines 1-14); broker means for brokering a connection between the

client and a secured service based on a second request received through the input

means from the client by leveraging the persistent connection with the client (column 5,

lines 1-25).

Regarding claim 45, French et al. teach the system of claim 40 wherein the

persistent connection means comprises: receiving means for receiving keystone

authentication information from the client; keystone authentication means for

authenticating the client based on the keystone authentication information to provide a

keystone authentication associated with the persistent connection; and connection

means for establishing the persistent connection with the client based on the keystone

authentication (column 5, lines 25-53).

Regarding claim 46, French et al. teach the system of claim 45 wherein the

broker means includes leveraging means for receiving the second request from the

client for connection to the secured service after the persistent connection to the client

is established (column 6, lines 16-27).

Regarding claim 47, French et al. teach the system of claim 46 wherein the

leveraging means further comprises: leveraged authentication means for providing a

leveraged authentication based on the keystone authentication associated with the

persistent connection; and leveraged connection means for causing the leveraged

authentication to be used to establish the connection with the secured service (column

5, lines 43-53, column 6, lines 1-27).

Regarding claim 48, French et al. teach the system of claim 47 wherein the

leveraged authentication means comprises transparent authentication means for

causing the leveraged authentication to be provided based on the keystone

authentication without provision by the client of authentication information duplicative or

additional to the keystone authentication information used to establish the persistent

connection (column 6, lines 23-25).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.

Claims 2-5, 10-15, and 19 are rejected under 35 U.S.C. 103(a) as being

unpatentable over French et al. as applied to claim 1 above, and further in view of Kung.

Claims 21-24, 29-34, and 39 are rejected under 35 U.S.C. 103(a) as being

unpatentable over French et al. as applied to claim 20 above, and further in view of

Kung.

Claims 41-44 and 49-54 are rejected under 35 U.S.C. 103(a) as being

unpatentable over French et al. as applied to claim 40 above, and further in view of

Kung.

Regarding claims 19 and 39, the examiner interprets that the constraint implies

that the information has to be presented by the client for whom the connection was

brokered, since it is essential for the client to have presented the authorization

constraints prior to brokering the connection since authorization information is required, otherwise, the brokered connection would not have been permitted. French et al. teach brokering a connection between the client and a secured service (column 5, lines 10-42). Furthermore, Kung teaches the authorization information comprises constraint information (column 5, lines 19-37).

Regarding claim 2, French et al. teach the limitations as set forth under claim 1 above. However, French et al. do not disclose expressly the computer program of claim 1 wherein: the persistent connection is established based on keystone authentication information provided by the client; and the broker code segment comprises a transparent authentication code segment that causes the computer to leverage the keystone authentication to authenticate the client without provision by the client of authentication information duplicative or additional to the keystone authentication information used to establish the persistent connection.

Kung teaches the computer program of claim 1 wherein: the persistent connection is established based on keystone authentication information provided by the client; and the broker code segment comprises a transparent authentication code segment that causes the computer to leverage the keystone authentication to authenticate the client without provision by the client of authentication information duplicative or additional to the keystone authentication information used to establish the persistent connection (column 2, lines 47-68).

French et al. and Kung are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to authenticate the client without having the client provide duplicative or additional authentication information.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kung with the method of French et al. for the benefit of authenticating access to secured services to obtain the invention as specified in claim 2.

Regarding claim 3, French et al. teach the limitations as set forth under claim 1 above. However, French et al. do not disclose expressly the computer program of claim 1 wherein: the persistent connection is established based on keystone authentication information provided by the client; and the broker code segment comprises a transparent authentication code segment that causes the computer to leverage the keystone authentication to authenticate the client without provision by the client of authentication information duplicative of the keystone authentication information used to establish the persistent connection.

Kung teaches the computer program of claim 1 wherein: the persistent connection is established based on keystone authentication information provided by the client; and the broker code segment comprises a transparent authentication code segment that causes the computer to leverage the keystone authentication to authenticate the client without provision by the client of authentication information duplicative of the keystone authentication information used to establish the persistent connection (column 2, lines 47-68).

French et al. and Kung are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to authenticate the client without having the client provide duplicative authentication information.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kung with the method of French et al. for the benefit of authenticating access to secured services to obtain the invention as specified in claim 3.

Regarding claim 4, French et al. teach the limitations as set forth under claim 1 above. However, French et al. do not disclose expressly the computer program of claim 1 wherein: the persistent connection is established based on keystone authentication information provided by the client; and the broker code segment comprises a transparent authentication code segment that causes the computer to leverage the keystone authentication to authenticate the client without provision by the client of authentication information additional to the keystone authentication information used to establish the persistent connection.

Kung teaches the computer program of claim 1 wherein: the persistent connection is established based on keystone authentication information provided by the client; and the broker code segment comprises a transparent authentication code segment that causes the computer to leverage the keystone authentication to authenticate the client without provision by the client of authentication information

additional to the keystone authentication information used to establish the persistent

connection (column 2, lines 47-68).

French et al. and Kung are analogous art because they are directed to a similar

problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary

skill in the art to authenticate the client without having the client provide duplicative

authentication information.

Therefore, it would have been obvious to a person of ordinary skill in the art to

combine the teachings of Kung with the method of French et al. for the benefit of

authenticating access to secured services to obtain the invention as specified in claim 4.

Regarding claim 5, French et al. teach the limitations as set forth under claim 1

above. However, French et al. do not disclose expressly the computer program of claim

1 wherein the broker code segment causes the computer to broker the connection

between the client and the secured service before the client attempts to connect to the

secured service directly.

Kung teaches the computer program of claim 1 wherein the broker code segment

causes the computer to broker the connection between the client and the secured

service before the client attempts to connect to the secured service directly (column 3,

lines 12-24).

French et al. and Kung are analogous art because they are directed to a similar

problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to broker a persistent connection between the client and the secured service.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kung with the method of French et al. for the benefit of brokering persistent connections to secured services to obtain the invention as specified in claim 5.

Regarding claim 10, French et al. teach the limitations as set forth under claim 1 above. However, French et al. do not disclose expressly the computer program of claim 1 wherein: the persistent connection code segment includes a first partition code segment that causes the computer to establish the persistent connection between the client and a persistent connection service in response to the first request from the client; and the broker code segment includes a second partition code segment that causes the computer to use a broker service to broker the connection between the client and the secured service based on the second request from the client.

Kung teaches the computer program of claim 1 wherein: the persistent connection code segment includes a first partition code segment that causes the computer to establish the persistent connection between the client and a persistent connection service in response to the first request from the client; and the broker code segment includes a second partition code segment that causes the computer to use a broker service to broker the connection between the client and the secured service

based on the second request from the client (column 3, lines 64-68, column 4, lines 1-29).

French et al. and Kung are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to establish a connection between a client and a secured service.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kung with the method of French et al. for the benefit of access to a secured service to obtain the invention as specified in claim 10.

Regarding claim 11, French et al. and Kung teach the limitations as set forth under claim 10 above. Furthermore, Kung teaches the computer program of claim 10 wherein the second partition code segment comprises a reception code segment that causes the computer to receive from the persistent connection service at a connection request address a communication based on the second request from the client (column 5, lines 1-37).

Regarding claim 12, French et al. teach the limitations as set forth under claim 1 above. However, French et al. do not disclose expressly the computer program of claim 1 wherein the broker code segment comprises: a liaison code segment that causes the computer program to communicate as an intermediary with the client and the secured service based on the second request from the client so that the client may obtain authorization information that may be used to establish the connection to the secured service; a determining code segment that causes the computer to determine the

authorization information based on the second request from the client; a communication code segment that causes the computer to communicate to the secured service an indication that the client desires to connect to the secured service, wherein the indication comprises the authorization information; a receiving code segment that causes the computer to receive a response from the secured service indicating that the client may be allowed to establish the connection to the secured service by presenting the authorization information to the secured service; and an authorization code segment that causes the computer to communicate the authorization information to enable the client to present the authorization information to the secured service to establish the connection with the secured service.

Kung teaches the computer program of claim 1 wherein the broker code segment comprises: a liaison code segment that causes the computer program to communicate as an intermediary with the client and the secured service based on the second request from the client so that the client may obtain authorization information that may be used to establish the connection to the secured service (column 4, lines 60-65); a determining code segment that causes the computer to determine the authorization information based on the second request from the client(column 4, lines 65-68, column 5, lines 1-5); a communication code segment that causes the computer to communicate to the secured service an indication that the client desires to connect to the secured service, wherein the indication comprises the authorization information (column 5, lines 1-10); a receiving code segment that causes the computer to receive a response from the secured service indicating that the client may be allowed to establish the connection to

the secured service by presenting the authorization information to the secured service;

and an authorization code segment that causes the computer to communicate the

authorization information to enable the client to present the authorization information to

the secured service to establish the connection with the secured service (column 5,

lines 1-37).

French et al. and Kung are analogous art because they are directed to a similar

problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary

skill in the art to broker a connection between a client and a secured service.

Therefore, it would have been obvious to a person of ordinary skill in the art to

combine the teachings of Kung with the method of French et al. for the benefit of

brokering a connection between a client and a secured service to obtain the invention

as specified in claim 12.

Regarding claim 13, French et al. teach the limitations as set forth under claim 1

above. However, French et al. do not disclose expressly the computer program of claim

1 wherein the broker code segment further comprises: a liaison code segment that

causes the computer program to communicate as an intermediary with the client and

the secured service based on the second request from the client so that the client may

obtain authorization information that may be used to establish the connection to the

secured service; a communication code segment that causes the computer to

communicate to the secured service an indication that the client desires to connect to

the secured service; a receiving code segment that causes the computer to receive a

response from the secured service indicating that the secured service may accept a

connection from the client, wherein the response includes the authorization information;

an authorization code segment that causes the computer to communicate the

authorization information to enable the client to present the authorization information to

the secured service to establish the connection with the secured service.

Kung teaches the computer program of claim 1 wherein the broker code segment

further comprises: a liaison code segment that causes the computer program to

communicate as an intermediary with the client and the secured service based on the

second request from the client so that the client may obtain authorization information

that may be used to establish the connection to the secured service (column 4, lines 60-

65); a communication code segment that causes the computer to communicate to the

secured service an indication that the client desires to connect to the secured service

(column 5, lines 1-10); a receiving code segment that causes the computer to receive a

response from the secured service indicating that the secured service may accept a

connection from the client, wherein the response includes the authorization information;

an authorization code segment that causes the computer to communicate the

authorization information to enable the client to present the authorization information to

the secured service to establish the connection with the secured service(column 5, lines

1-37).

French et al. and Kung are analogous art because they are directed to a similar

problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to broker a connection between a client and a secured service.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kung with the method of French et al. for the benefit of brokering a connection between a client and a secured service to obtain the invention as specified in claim 13.

Regarding claim 14, French et al. and Kung teach the limitations as set forth under claim 13 above. Furthermore, Kung teaches the computer program of claim 13 wherein the response received by the computer from the secured service includes authorization information determined by the secured service (column 5, lines 19-37).

Regarding claim 15, French et al. teach the limitations as set forth under claim 1 above. However, French et al. do not disclose expressly the computer program of claim 1 wherein: the broker code segment includes a liaison code segment that causes the computer program to communicate as an intermediary with the client and the secured service based on the second request from the client so that the client may obtain authorization information that may be used to establish the connection to the secured service; the authorization information comprises constraint information; and the authorization information may be ineffective to establish a connection with the secured service if the connection constraints are not satisfied by the constraint information.

Kung teaches the computer program of claim 1 wherein: the broker code segment includes a liaison code segment that causes the computer program to communicate as an intermediary with the client and the secured service based on the

second request from the client so that the client may obtain authorization information

that may be used to establish the connection to the secured service (column 4, lines 60-

68); the authorization information comprises constraint information (column 5, lines 19-

37); and the authorization information may be ineffective to establish a connection with

the secured service if the connection constraints are not satisfied by the constraint

information.

French et al. and Kung are analogous art because they are directed to a similar

problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary

skill in the art to use an intermediary between the client and the secured service to

broker the connection.

Therefore, it would have been obvious to a person of ordinary skill in the art to

combine the teachings of Kung with the method of French et al. for the benefit of

accessing a secured service from a client to obtain the invention as specified in claim

15.

Regarding claim 21, French et al. teach the limitations as set forth under claim 20

above. However, French et al. do not disclose expressly the method of claim 20

wherein: establishing the persistent connection with the client includes authenticating

the client based on keystone authentication information provided by the client; and

brokering the connection between the client and the secured service includes

leveraging the keystone authentication information to authenticate the client without

provision by the client of authentication information duplicative or additional to the

keystone information used to establish the persistent connection.

Kung teaches the method of claim 20 wherein: establishing the persistent

connection with the client includes authenticating the client based on keystone

authentication information provided by the client; and brokering the connection between

the client and the secured service includes leveraging the keystone authentication

information to authenticate the client without provision by the client of authentication

information duplicative or additional to the keystone information used to establish the

persistent connection (column 2, lines 47-68).

French et al. and Kung are analogous art because they are directed to a similar

problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary

skill in the art to authenticate the client without having the client provide duplicative or

additional authentication information.

Therefore, it would have been obvious to a person of ordinary skill in the art to

combine the teachings of Kung with the method of French et al. for the benefit of

authenticating access to secured services to obtain the invention as specified in claim

21.

Regarding claim 22, French et al. teach the limitations as set forth under claim 20

above. However, French et al. do not disclose expressly the method of claim 20

wherein: establishing the persistent connection with the client includes authenticating

the client based on keystone authentication information provided by the client; and

brokering the connection between the client and the secured service includes leveraging the keystone authentication information to authenticate the client without provision by the client of authentication information duplicative of the keystone information used to establish the persistent connection.

Kung teaches the method of claim 20 wherein: establishing the persistent connection with the client includes authenticating the client based on keystone authentication information provided by the client; and brokering the connection between the client and the secured service includes leveraging the keystone authentication information to authenticate the client without provision by the client of authentication information duplicative of the keystone information used to establish the persistent connection (column 2, lines 47-68).

French et al. and Kung are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to authenticate the client without having the client provide duplicative or additional authentication information.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kung with the method of French et al. for the benefit of authenticating access to secured services to obtain the invention as specified in claim 22.

Regarding claim 23, French et al. teach the limitations as set forth under claim 20 above. However, French et al. do not disclose expressly the method of claim 20

wherein: establishing the persistent connection with the client includes authenticating

the client based on keystone authentication information provided by the client; and

brokering the connection between the client and the secured service includes

leveraging the keystone authentication information to authenticate the client without

provision by the client of authentication information additional to the keystone

information used to establish the persistent connection.

Kung teaches the method of claim 20 wherein: establishing the persistent

connection with the client includes authenticating the client based on keystone

authentication information provided by the client; and brokering the connection between

the client and the secured service includes leveraging the keystone authentication

information to authenticate the client without provision by the client of authentication

information additional to the keystone information used to establish the persistent

connection (column 2, lines 47-68).

French et al. and Kung are analogous art because they are directed to a similar

problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary

skill in the art to authenticate the client without having the client provide duplicative or

additional authentication information.

Therefore, it would have been obvious to a person of ordinary skill in the art to

combine the teachings of Kung with the method of French et al. for the benefit of

authenticating access to secured services to obtain the invention as specified in claim

23.

Regarding claim 24, French et al. teach the limitations as set forth under claim 20 above. However, French et al. do not disclose expressly the method of claim 20 wherein the connection between the client and the secured service is brokered before the client attempts to connect to the secured service directly.

Kung teaches the method of claim 20 wherein the connection between the client and the secured service is brokered before the client attempts to connect to the secured service directly (column 3, lines 12-24).

French et al. and Kung are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to broker a persistent connection between the client and the secured service.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kung with the method of French et al. for the benefit of authenticating access to secured services to obtain the invention as specified in claim 24.

Regarding claim 29, French et al. teach the limitations as set forth under claim 20 above. However, French et al. do not disclose expressly the method of claim 20 wherein; the persistent connection is established between the client and a persistent connection service; and the connection between the client and the secured service is brokered by a broker service.

Kung teaches the method of claim 20 wherein; the persistent connection is

established between the client and a persistent connection service; and the connection

between the client and the secured service is brokered by a broker service (column 3,

lines 64-68, column 4, lines 1-29).

French et al. and Kung are analogous art because they are directed to a similar

problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary

skill in the art to establish a connection between a client and a secured service.

Therefore, it would have been obvious to a person of ordinary skill in the art to

combine the teachings of Kung with the method of French et al. for the benefit of access

to a secured service to obtain the invention as specified in claim 29.

Regarding claim 30, French et al. and Kung teach the limitations as set forth

under claim 29 above. Furthermore, Kung teaches the method of claim 29 wherein

brokering the connection between the client and the secured service includes receiving

from the persistent connection service at a connection request address a

communication based on the second request from the client and wherein the connection

request address varies systematically with time (column 5, lines 1-37).

Regarding claim 31, French et al. teach the limitations as set forth under claim 20

above. However, French et al. do not disclose expressly the method of claim 20 wherein

brokering comprises: receiving the second request from the client to connect to the

secured service; determining authorization information based on the second request

from the client; communicating to the secured service an indication that the client

desires to connect to the secured service, wherein the indication comprises the

authorization information; receiving a response from the secured service indicating that

the client may be allowed to establish the connection to the secured service by

presenting the authorization information to the secured service; and communicating the

authorization information to enable the client to present the authorization information to

the secured service to establish the connection with the secured service.

Kung teaches the method of claim 20 wherein brokering comprises: receiving the

second request from the client to connect to the secured service (column 4, lines 60-

65); determining authorization information based on the second request from the client

(column 4, lines 65-68, column 5, lines 1-5); communicating to the secured service an

indication that the client desires to connect to the secured service, wherein the

indication comprises the authorization information (column 5, lines 1-10); receiving a

response from the secured service indicating that the client may be allowed to establish

the connection to the secured service by presenting the authorization information to the

secured service ; and communicating the authorization information to enable the client

to present the authorization information to the secured service to establish the

connection with the secured service (column 5, lines 1-37).

French et al. and Kung are analogous art because they are directed to a similar

problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary

skill in the art to broker a connection between a client and a secured service.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kung with the method of French et al. for the benefit of brokering a connection between a client and a secured service to obtain the invention as specified in claim 31.

Regarding claim 32, French et al. teach the limitations as set forth under claim 20 above. However, French et al. do not disclose expressly the method of claim 20 wherein brokering comprises: receiving the second request from the client to connect to the secured service; communicating to the secured service an indication that the client desires to connect to the secured service; receiving a response from the secured service indicating that the secured service may accept a connection from the client, wherein the response includes authorization information; and communicating the authorization information to enable the client to present the authorization information to the secured service to establish the connection with the secured service.

Kung teaches the method of claim 20 wherein brokering comprises: receiving the second request from the client to connect to the secured service (column 4, lines 60-65); communicating to the secured service an indication that the client desires to connect to the secured service (column 5, lines 1-10); receiving a response from the secured service indicating that the secured service may accept a connection from the client, wherein the response includes authorization information; and communicating the authorization information to enable the client to present the authorization information to the secured service to establish the connection with the secured service (column 5, lines 1-37).

French et al. and Kung are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to broker a connection between a client and a secured service.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kung with the method of French et al. for the benefit of brokering a connection between a client and a secured service to obtain the invention as specified in claim 32.

Regarding claim 33, French et al. and Kung teach the limitations as set forth under claim 32 above. Furthermore, Kung teaches the method of claim 32 wherein the authorization information is determined by the secured service (column 5, lines 19-37).

Regarding claim 34, French et al. teach the limitations as set forth under claim 20 above. However, French et al. do not disclose expressly the method of claim 20 wherein: brokering comprises communicating as an intermediary with the client and the secured service based on the second request from the client so that the client may obtain authorization information that may be used to establish the connection to the secured service; the authorization information comprises constraint information; and the authorization information may be ineffective to establish a connection with the secured service if the connection constraints are not satisfied by the constraint information.

Kung teaches the method of claim 20 wherein: brokering comprises communicating as an intermediary with the client and the secured service based on the second request from the client so that the client may obtain authorization information

that may be used to establish the connection to the secured service (column 4, lines 60-68); the authorization information comprises constraint information (column 5, lines 19-37); and the authorization information may be ineffective to establish a connection with the secured service if the connection constraints are not satisfied by the constraint information.

French et al. and Kung are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use an intermediary between the client and the secured service to broker the connection.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kung with the method of French et al. for the benefit of accessing a secured service from a client to obtain the invention as specified in claim 34.

Regarding claim 41, French et al. teach the limitations as set forth under claim 40 above. However, French et al. do not disclose expressly the system of claim 40 wherein: the persistent connection is established based on keystone authentication information provided by the client; and the broker means comprises transparent authentication means for leveraging the keystone authentication to authenticate the client without provision by the client of authentication information duplicative or additional to the keystone authentication information used to establish the persistent connection

Kung teaches the system of claim 40 wherein: the persistent connection is established based on keystone authentication information provided by the client; and the broker means comprises transparent authentication means for leveraging the keystone authentication to authenticate the client without provision by the client of authentication information duplicative or additional to the keystone authentication information used to establish the persistent connection (column 2, lines 47-68).

French et al. and Kung are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to authenticate the client without having the client provide duplicative or additional authentication information.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kung with the method of French et al. for the benefit of authenticating access to secured services to obtain the invention as specified in claim 41.

Regarding claim 42, French et al. teach the limitations as set forth under claim 40 above. However, French et al. do not disclose expressly the system of claim 40 wherein: the persistent connection is established based on keystone authentication information provided by the client; and the broker means comprises transparent authentication means for leveraging the keystone authentication to authenticate the client without provision by the client of authentication information duplicative of the keystone authentication information used to establish the persistent connection

Kung teaches the system of claim 40 wherein: the persistent connection is established based on keystone authentication information provided by the client; and the broker means comprises transparent authentication means for leveraging the keystone authentication to authenticate the client without provision by the client of authentication information duplicative of the keystone authentication information used to establish the persistent connection (column 2, lines 47-68).

French et al. and Kung are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to authenticate the client without having the client provide duplicative or additional authentication information.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kung with the method of French et al. for the benefit of authenticating access to secured services to obtain the invention as specified in claim 42.

Regarding claim 43, French et al. teach the limitations as set forth under claim 40 above. However, French et al. do not disclose expressly the system of claim 40 wherein: the persistent connection is established based on keystone authentication information provided by the client; and the broker means comprises transparent authentication means for leveraging the keystone authentication to authenticate the client without provision by the client of authentication information additional to the keystone authentication information used to establish the persistent connection

Kung teaches the system of claim 40 wherein: the persistent connection is established based on keystone authentication information provided by the client; and the broker means comprises transparent authentication means for leveraging the keystone authentication to authenticate the client without provision by the client of authentication information additional to the keystone authentication information used to establish the persistent connection (column 2, lines 47-68).

French et al. and Kung are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to authenticate the client without having the client provide duplicative or additional authentication information.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kung with the method of French et al. for the benefit of authenticating access to secured services to obtain the invention as specified in claim 43.

Regarding claim 44, French et al. teach the limitations as set forth under claim 40 above. However, French et al. do not disclose expressly the system of claim 40 wherein the broker means brokers the connection between the client and the secured service before the client attempts to connect to the secured service directly.

Kung teaches the system of claim 40 wherein the broker means brokers the connection between the client and the secured service before the client attempts to connect to the secured service directly (column 3, lines 12-24).

French et al. and Kung are analogous art because they are directed to a similar

problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary

skill in the art to broker a persistent connection between the client and the secured

service.

Therefore, it would have been obvious to a person of ordinary skill in the art to

combine the teachings of Kung with the method of French et al. for the benefit of

authenticating access to secured services to obtain the invention as specified in claim

44.

Regarding claim 49, French et al. teach the limitations as set forth under claim 40

above. However, French et al. do not disclose expressly the system of claim 40

wherein: the persistent connection means includes first partition means for establishing

the persistent connection between the client and a persistent connection service in

response to the first request from the client; and the broker means includes second

partition means for causing a broker service to be used to broker the connection

between the client and the secured service based on the second request from the client.

Kung teaches the system of claim 40 wherein: the persistent connection means

includes first partition means for establishing the persistent connection between the

client and a persistent connection service in response to the first request from the client;

and the broker means includes second partition means for causing a broker service to

be used to broker the connection between the client and the secured service based on

the second request from the client (column 3, lines 64-68, column 4, lines 1-29).

French et al. and Kung are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to establish a connection between a client and a secured service.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kung with the method of French et al. for the benefit of access to a secured service to obtain the invention as specified in claim 49.

Regarding claim 50, French et al. and Kung teach the limitations as set forth under claim 49 above. Furthermore, Kung teaches the system of claim 49 wherein the second partition means comprises reception means for receiving from the persistent connection service at a connection request address a communication based on the second request from the client (column 5, lines 1-37).

Regarding claim 51, French et al. teach the limitations as set forth under claim 40 above. However, French et al. do not disclose expressly the system of claim 40 wherein the broker means further comprises: liaison means for communicating as an intermediary with the client and the secured service based on the second request from the client so that the client may obtain authorization information that may be used to establish the connection to the secured service; determining means for determining the authorization information based on the second request from the client; communication means for communicating to the secured service an indication that the client desires to connect to the secured service, wherein the indication comprises the authorization information;. receiving means for receiving a response from the secured service

indicating that the client may be allowed to establish the connection to the secured service by presenting the authorization information to the secured service; and authorization means for communicating the authorization information to the client to enable the client to present the authorization information to the secured service to establish the connection with the secured service.

Kung teaches the system of claim 40 wherein the broker means further comprises: liaison means for communicating as an intermediary with the client and the secured service based on the second request from the client so that the client may obtain authorization information that may be used to establish the connection to the secured service (column 4, lines 60-65); determining means for determining the authorization information based on the second request from the client (column 4, lines 65-68, column 5, lines 1-5); communication means for communicating to the secured service an indication that the client desires to connect to the secured service, wherein the indication comprises the authorization information (column 5, lines 1-10); receiving means for receiving a response from the secured service indicating that the client may be allowed to establish the connection to the secured service by presenting the authorization information to the secured service; and authorization means for communicating the authorization information to the client to enable the client to present the authorization information to the secured service to establish the connection with the secured service (column 5, lines 1-37).

French et al. and Kung are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to broker a connection between a client and a secured service.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kung with the method of French et al. for the benefit of brokering a connection between a client and a secured service to obtain the invention as specified in claim 51.

Regarding claim 52, French et al. teach the limitations as set forth under claim 40 above. However, French et al. do not disclose expressly the system of claim 40 wherein the broker means further comprises: liaison means for communicating as an intermediary with the client and the secured service based on the second request from the client so that the client may obtain authorization information that may be used to establish the connection to the secured service; communication means for communicating to the secured service an indication that the client desires to connect to the secured service; receiving means for receiving a response from the secured service indicating that the secured service may accept a connection from the client, wherein the response includes the authorization information; authorization means for communicating the authorization information to the client to enable the client to present the authorization information to the secured service to establish the connection with the secured service.

Kung teaches the system of claim 40 wherein the broker means further comprises: liaison means for communicating as an intermediary with the client and the secured service based on the second request from the client so that the client may

obtain authorization information that may be used to establish the connection to the secured service (column 4, lines 60-65); communication means for communicating to the secured service an indication that the client desires to connect to the secured service (column 5, lines 1-10); receiving means for receiving a response from the secured service indicating that the secured service may accept a connection from the client, wherein the response includes the authorization information; authorization means for communicating the authorization information to the client to enable the client to present the authorization information to the secured service to establish the connection with the secured service (column 5, lines 1-37).

French et al. and Kung are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to broker a connection between a client and a secured service.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kung with the method of French et al. for the benefit of brokering a connection between a client and a secured service to obtain the invention as specified in claim 52.

Regarding claim 53, French et al. and Kung teach the limitations as set forth under claim 52 above. Furthermore, Kung teaches the system of claim 52 wherein the response received by the receiving means includes authorization information determined by the secured service (column 5, lines 19-37).

Regarding claim 54, French et al. teach the limitations as set forth under claim 40 above. However, French et al. do not disclose expressly the system of claim 40 wherein: the broker means includes liaison means for communicating as an intermediary with the client and the secured service based on the second request from the client so that the client may obtain authorization information that may be used to establish the connection to the secured service; the authorization information comprises constraint information; and the authorization information may be ineffective to establish a connection with the secured service if the connection constraints are not satisfied by the constraint information.

Kung teaches the system of claim 40 wherein: the broker means includes liaison means for communicating as an intermediary with the client and the secured service based on the second request from the client so that the client may obtain authorization information that may be used to establish the connection to the secured service (column 4, lines 60-68); the authorization information comprises constraint information (column 5, lines 19-37); and the authorization information may be ineffective to establish a connection with the secured service if the connection constraints are not satisfied by the constraint information.

French et al. and Kung are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use an intermediary between the client and the secured service to broker the connection.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kung with the method of French et al. for the benefit of accessing a secured service from a client to obtain the invention as specified in claim 54.

Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over French et al. and Kung as applied to claim 15 above, and further in view of Cohen et al.

Claims 35, 36, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over French et al. and Kung as applied to claim 34 above, and further in view of Cohen et al.

Regarding claim 16, French et al. and Kung teach the limitations as set forth under claim 15 above. However, French et al. and Kung do not disclose expressly the computer program of claim 15 wherein the connection constraints include a constraint that limits a number of uses for the authorization information to a predetermined threshold number.

Cohen et al. teach the computer program of claim 15 wherein the connection constraints include a constraint that limits a number of uses for the authorization information to a predetermined threshold number (column 6, lines 4-5).

French et al., Kung, and Cohen et al. are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to have a predetermined number of uses for the authorization information.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Cohen et al. with the method of French et al. and Kung for the benefit of secure access to computer systems to obtain the invention as specified in claim 16.

Regarding claim 18, French et al. and Kung teach the limitations as set forth under claim 15 above. However, French et al. and Kung do not disclose expressly the computer program of claim 15 wherein the connection constraints include a constraint that the authorization information be used within a predetermined time window.

Cohen et al. teach the computer program of claim 15 wherein the connection constraints include a constraint that the authorization information be used within a predetermined time window (column 13, lines 35-40).

French et al., Kung, and Cohen et al. are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to have a predetermined time window for using the authorization information.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Cohen et al. with the method of French et al. and Kung for the benefit of secure access to computer systems to obtain the invention as specified in claim 18.

Regarding claim 35, French et al. and Kung teach the limitations as set forth under claim 34 above. However, French et al. and Kung do not disclose expressly the

method of claim 34 wherein the connection constraints include a constraint that limits a number of uses for the authorization information to a predetermined threshold number.

Cohen et al. teach the method of claim 34 wherein the connection constraints include a constraint that limits a number of uses for the authorization information to a predetermined threshold number (column 6, lines 4-5).

French et al., Kung, and Cohen et al. are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to have a predetermined number of uses for the authorization information.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Cohen et al. with the method of French et al. and Kung for the benefit of secure access to computer systems to obtain the invention as specified in claim 35.

Regarding claim 36, French et al. and Kung teach the limitations as set forth under claim 34 above. However, French et al. and Kung do not disclose expressly the method of claim 34 wherein the connection constraints include a constraint that the number of times that the authorization information has been used not exceed a predetermined number of times.

Cohen et al. teach the method of claim 34 wherein the connection constraints include a constraint that the number of times that the authorization information has been used not exceed a predetermined number of times (column 6, lines 4-5).

French et al., Kung, and Cohen et al. are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to have a predetermined number of times for use of the authorization information.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Cohen et al. with the method of French et al. and Kung for the benefit of secure access to computer systems to obtain the invention as specified in claim 36.

Regarding claim 38, French et al. and Kung teach the limitations as set forth under claim 34 above. However, French et al. and Kung do not disclose expressly the method of claim 34 wherein the connection constraints include a constraint that the authorization information be used within a predetermined time window

Cohen et al. the method of claim 34 wherein the connection constraints include a constraint that the authorization information be used within a predetermined time window (column 13, lines 35-40).

French et al., Kung, and Cohen et al. are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to have a predetermined time window for using the authorization information.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Cohen et al. with the method of French et al. and Kung for the benefit of secure access to computer systems to obtain the invention as specified in claim 38.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over French et al., Kung, and Cohen et al. as applied to claim 16 above, and further in view of West et al. (Patent Number US 6,538,996).

Regarding claim 17, French et al., Kung, and Cohen et al. teach the limitations as set forth under claim 16 above. However, French et al., Kung, and Cohen et al. do not disclose expressly the computer program of claim 16 wherein the connection constraints include a one-time-use password.

West et al. teach the computer program of claim 16 wherein the connection constraints include a one-time-use password (column 30, lines 8-23).

French et al., Kung, Cohen et al., and West et al. are analogous art because they are directed to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use a one-time-use password.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of West et al. with the method of French et al., Kung, and Cohen et al. for the benefit of secure access to computer systems to obtain the invention as specified in claim 17.

Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over French

et al., and Kung as applied to claim 34 above, and further in view of West et al. (Patent

Number US 6,538,996).

Regarding claim 37, French et al. and Kung teach the limitations as set forth

under claim 34 above. However, French et al. and Kung do not disclose expressly the

method of claim 34 wherein the connection constraints include a one-time-use

password.

West et al. teach the method of claim 34 wherein the connection constraints

include a one-time-use password (column 30, lines 8-23).

French et al., Kung, and West et al. are analogous art because they are directed

to a similar problem solving area – secure access to computer systems.

At the time of the invention it would have been obvious to a person of ordinary

skill in the art to use a one-time-use password.

Therefore, it would have been obvious to a person of ordinary skill in the art to

combine the teachings of West et al. with the method of French et al. and Kung for the

benefit of secure access to computer systems to obtain the invention as specified in

claim 37.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David G. Cervetti whose telephone number is (571) 272-5861. The examiner can normally be reached on Monday-Friday 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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